

Commissioner of Patents  
Serial No. 10/757,290  
Amendment Date: September 17, 2007  
Reply to Office Action dated June 15, 2007  
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**AMENDMENTS TO THE SPECIFICATION**

Please replace the paragraphs shown at lines 5-8 of page 8 of the specification with the following amended paragraphs:

FIG. 1A shows a cross-sectional side view of an embodiment of a bulb assembly according to the present invention.

FIG. 1B shows a cross-sectional side view of an embodiment of a bulb assembly according to the present invention.

Please replace the paragraph shown at lines 10-11 of page 8 of the specification with the following amended paragraph:

FIG. 2B shows a cross-sectional side view of an embodiment of a bulb according to the present invention.

Please replace the paragraph shown at lines 13-14 of page 8 of the specification with the following amended paragraph:

FIG. 2D shows a cross-sectional side view of an embodiment of a bulb according to the present invention.

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Please add the following paragraphs immediately after the paragraph that ends at line 16 of page 8 of the specification:

FIG. 4A shows a top view of an embodiment of a bulb according to the present invention.

FIG. 4B shows a cross-sectional side view of an embodiment of a bulb assembly according to the present invention.

FIG. 4C shows a partially cutaway end view of an embodiment of a bulb assembly according to the present invention.

Please replace the paragraph that begins on page 9, line 17, with the following amended paragraph:

FIGS. 2A-D show embodiments of bulb 11 according to the present invention. FIG. 2A shows a top view of an embodiment of bulb 11 wherein vortex tube 23 is constructed with a right-hand spiral. FIG. 2B shows a cross-sectional view of the embodiment of bulb 11 shown in FIG. 2A. FIG. 2C shows a top view of an embodiment of bulb 11 wherein vortex tube 23 is constructed with a left-hand spiral. FIG. 2D shows a cross-sectional view of the embodiment of bulb 11 shown in FIG. **2A 2C**.

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Please replace the paragraph that begins on page 10, line 17, with the following amended paragraph:

Vortex tube 23 comprises a hollow tube of a rigid, gas-impermeable, nonconductive material (such as, for example, glass), formed into a concentric spiral and having a first open end 231 and a second open end 232. The hollow interior of vortex 23 communicates between first open end 231 and second open end 232. According to an embodiment of the present invention, the spiral of vortex tube 23 comprises three or more turns. Preferably, vortex tube 23 comprises a prime number of turns, but this is not required. The turns of vortex tube 23 are concentric and decrease in diameter between first open end 231 and second open end 232 such that vortex tube 23 takes on a conical appearance. As mentioned previously herein, vortex tube 23 may be constructed with either a right-hand or left-hand spiral. It is preferred that two bulb assemblies, one comprising a right-hand spiral and the other comprising a left-hand spiral, are used in tandem to enhance the effects of the present invention, but this is not required. In an alternate embodiment of bulb 11 according to the present invention (~~not shown~~) (as shown in FIGS. 4A-C), two vortex tubes 23, one comprising a right-hand spiral and the other comprising a left-hand spiral, are enclosed within a single shell 21. Each vortex tube 23 has its own inlet tube 22 and outlet tube 24 in this embodiment.